

WHAT IS CLAIMED IS:

1. A solar heat utilization stirling engine power generation plant comprising:

a Fresnel lens (1) for collecting a solar heat; 5
a quartz glass light guiding fiber (3) for guiding a heat source collected by the Fresnel lens (1) and having a temperature between about 600°C and about 2000°C to a predetermined place;

10 a stirling engine (4) driven by the heat source from the light guiding fiber (3); and

a power generator (5) driven by the stirling engine (4).

2. A solar heat utilization stirling engine power generation plant as claimed in claim 1, further 15 comprising a tracking apparatus (2) for tracking the solar heat.

3. A solar heat utilization stirling engine power generation plant as claimed in claim 1 or 2, wherein a light receiving portion (31) of the light 20 guiding fiber (3) receiving the solar heat from said Fresnel lens (1) is formed in an approximately conical shape in which a diameter is made larger in accordance with going close to the Fresnel lens (1).